In the claims:

1. (Currently Amended) A method of diagnosing predisposition to, or presence of ovarian cancer, breast cancer and/or lung cancer in a subject, the method comprising determining a level of SIM2 in a biological sample obtained from the subject, said level being correlatable with predisposition to, or presence or absence of the ovarian cancer, breast cancer and/or lung cancer, thereby diagnosing predisposition to, or presence of ovarian cancer, breast cancer and/or lung cancer in the subject, said level of SIM2 being determined according to expression of a polynucleotide sequence according to SEQ ID NO:7 or a fragment thereof.

2. (Original) The method of claim 1, wherein said biological sample is a tissue sample and/or a body fluid sample.

3. (Original) The method of claim 2, wherein said tissue sample is selected from the group consisting of an ovarian tissue, a lung tissue and a breast tissue.

4. (Currently Amended) The method of claim 1, wherein said SIM2 fragment comprises ~~is selected from the group consisting of~~ SEQ ID NOs: ~~1, 2, 3, 7, 8 and 9~~.

5. (Original) The method of claim 1, wherein said determining level of said SIM2 is effected at an mRNA level.

6. (Original) The method of claim 1, wherein said determining level of said SIM2 is effected at a protein level.

7-17. (Canceled).

18. (Original) Use of a SIM42 detecting agent for detecting ovarian, breast and/or lung cancer.

19. (Original) The use of claim 18, wherein said agent for detecting ovarian, breast and/or lung cancer is an oligonucleotide.

20. (Canceled).

21. (Original) The use of claim 18, wherein said agent for detecting ovarian, breast and/or lung cancer is coupled to a detectable moiety selected from the

group consisting of a chromogenic moiety, a fluorogenic moiety, a radioactive moiety and a light-emitting moiety.

22-41. (Canceled).

42. (New) The method of claim 5, wherein said determining level of said SIM2 comprises amplification with a primer pair for specifically amplifying a polynucleotide according to SEQ ID NO:7.

43. (New) The method of claim 42, wherein said primer pair is capable of specifically amplifying polynucleotide according to SEQ ID NO:9.

44. (New) The method of claim 43, wherein said primer pair comprises SEQ ID NOs: 10 and 11.

45. (New) The method of claim 1, wherein said lung cancer comprises one of adenocarcinoma or squamous cell carcinoma.

46. (New) The method of claim 1, wherein said ovarian cancer comprises a papillary serous ovarian cancer.

47. (New) The method of claim 46, wherein said papillary serous ovarian cancer comprises one of carcinoma, adenocarcinoma or cystadenocarcinoma.